We claim:

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- 1. An article comprising multimode optical fiber having an essentially circular core with a twist impressed on the core, the twist being at least one per meter of optical fiber.
- 2. Article according to claim 1, wherein the twist alternates between clockwise twist and counterclockwise twist.
- 3. Article according to claim 2, wherein the twist is at least four per meter of optical fiber.
 - 4. Article according to claim 2 wherein the core has an ovality of less than 6%.
 - 5. A method for the manufacture of multimode optical fiber comprising the steps of:
 - (a) preparing a multimode optical fiber preform, the preform having a core and a cladding with the core of the preform having an ovality of less than 6%,
- 20 (b) heating the preform,
 - (c) drawing an optical fiber from the preform, and
 - (d) twisting the drawn optical fiber during step (c).

- 6. The method of claim 5 wherein the twisting alternates between clockwise twisting and counterclockwise twisting.
- 7. The method of claim 6 wherein the twisting is at least one per meter of drawn fiber.
- 8. The method of claim 7 wherein the twisting is at least four per meter of drawn fiber.
- 9. The method of claim 5 wherein the optical fiber is silica-based.

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- 10. The method of claim 5 wherein the ratio of the core diameter to the cladding diameter is at least 0.2.
- 11. The method of claim 10 wherein the core diameter is at least 30 microns.
- 12. The method of claim 5 wherein the twisting has a spin frequency f, and f is varied during step (d).
- 13. The method of claim 5 wherein the twisting has a non-sinusoidal spin pattern.
 - 14. The method of claim 5 wherein the spin pattern is changed during step (d).